IN THE CLAIMS

The following listing of the claims is provided in accordance with 37 C.F.R. §1.121.

1.   (original)   A method for analyzing image data comprising:

generating a temporal change image based upon first and second images from different times by segmenting the first and second images and registering at least a portion of the segmented images with one another; and

analyzing the temporal change image via at least one CAD algorithm.

2.   (original)   The method of claim 1, wherein analyzing the temporal change image via the CAD algorithm includes diagnosing a physical condition of a patient.

3.   (original)   The method of claim 1, wherein the CAD algorithm identifies at least one feature of interest in the temporal change image.

4.   (original)   The method of claim 1, comprising performing quantitative analysis on the temporal change image.

5.   (original)   The method of claim 4, wherein the quantitative analysis includes determining a change in size of a feature of interest between the first and second images based upon the temporal change image.

6.   (original)   The method of claim 1, comprising presenting a report to a user along with at least one of the first image, the second image and the temporal change image.

7.   (original)   The method of claim 1, wherein the first and second images are generated by different imaging modalities.

8.   (original)   The method of claim 1, comprising analyzing at least the first image via a second CAD algorithm.

9.   (original)   A method for analyzing image data comprising:

analyzing a first image via at least one CAD algorithm to identify a feature of interest; and

if a feature of interest is identified in the first image, accessing a second image from a different time than the first image and generating a temporal change image based upon the first and second images.

10.   (original)   The method of claim 9, comprising reporting results of the analysis to a user if a feature of interest is not identified in the first image.

11.   (original)   The method of claim 9, comprising analyzing the temporal change image via a second CAD algorithm.

12.   (original)   The method of claim 11, wherein the CAD algorithm used for analyzing the first image is different from the CAD algorithm used for analyzing the temporal change image.

13.   (original)   The method of claim 12, wherein the CAD algorithm used for analyzing the first image has a sensitivity and a specificity to produce a desired level of positive identifications of potential features of interest, and wherein the CAD algorithm used for analyzing the temporal change image is configured to reduce the positive identifications of features of interest.

14.   (original)   The method of claim 9, wherein the temporal change image is generated by segmenting the first and second images and registering the segmented images with one another.

15.   (original)   The method of claim 9, comprising performing quantitative analysis on the temporal change image.

16.   (original)   The method of claim 15, wherein the quantitative analysis includes determining a change in size of a feature of interest between the first and second images based upon the temporal change image.

17.   (original)   The method of claim 9, comprising presenting a report to a user along with at least one of the first image, the second image and the temporal change image.

18.   (original)   A method for analyzing image data comprising:

analyzing first and second images from two different times via at least one CAD algorithm to identify a feature of interest;

comparing the results of the analyses; and

generating a temporal change image based upon the comparison.

19.   (original)   The method of claim 18, comprising analyzing the temporal change image via CAD algorithm to diagnose a physical condition of a patient.

20.   (original)   The method of claim 19, wherein the CAD algorithm used to analyze the temporal change image is different from the CAD algorithm used to analyze the first and second images.

21.   (currently amended)   The method of claim 18, comprising determining whether a discrepancy exists between the analyses of the [[fist]] first and second images, and wherein the temporal change image is generated only if such a discrepancy is identified.

22.   (original)   The method of claim 18, comprising applying the results of the analyses of the first and second images to a reconciler to reconcile the analyses of the images.

23.   (original)   The method of claim 22, comprising receiving results of a read of at least one of the first and second images by a human reader, and wherein the reconciler identifies differences between the analyses of the first and second images and the results of the read by the human reader.

24.   (original)   A method for analyzing image data comprising:
analyzing a first image from a first time via a CAD algorithm, and analyzing a second image from a second time via a CAD algorithm;
comparing the results of the analyses of the first and second images; and
interactively analyzing the first and second images based upon the comparison.

25.   (original)   The method of claim 24, wherein the comparison is performed following segmentation by the CAD algorithms.

26.   (original)   The method of claim 24, wherein the CAD algorithm used for analyzing the first image is different from the CAD algorithm used for analyzing the second image.

27.   (original)   The method of claim 24, comprising comparing results from the analyses of the first and second images during multiple stages of analysis via the CAD algorithm.

28. (original) A method for analyzing image data comprising:

analyzing a first image via at least one CAD algorithm to identify a feature of interest; and

if a feature of interest is identified in the first image, accessing a second image from a different time than the first image and analyzing the first and second images.

29. (original) The method of claim 28, wherein analyzing the first and second images includes quantifying a change in a feature of interest between the first image and the second image.

30. (original) A system for analyzing image data comprising:

means for generating a temporal change image based upon first and second images from different times by segmenting the first and second images and registering at least a portion of the segmented images with one another; and

means for analyzing the temporal change image via at least one CAD algorithm.

31. (original) A system for analyzing image data comprising:

means for analyzing a first image via at leaset one CAD algorithm to identify a feature of interest; and

means for accessing a second image from a different time than the first image if a feature of interest is identified in the first image, and for generating a temporal change image based upon the first and second images.

32. (original) A system for analyzing image data comprising:

means for analyzing first and second images from two different times via at least one CAD algorithm to identify a feature of interest;

means for comparing the results of the analyses; and

means for generating a temporal change image based upon the comparison.

33.   (original)   A system for analyzing image data comprising:

means for analyzing a first image from a first time via a CAD algorithm, and analyzing a second image from a second time via a CAD algorithm;

means for comparing the results of the analyses of the first and second images; and

means for interactively analyzing the first and second images based upon the comparison.

34.   (original)   A system for analyzing image data comprising:

means for analyzing a first image via at least one CAD algorithm to identify a feature of interest; and

means for accessing a second image from a different time than the first image if a feature of interest is identified in the first image, and for analyzing the first and second images.

35.   (currently amended)   A <u>computer-readable medium embodied with a</u> computer program for analyzing image data comprising:

~~at least one machine-readable medium; and~~

code stored on the ~~at least one machine~~<u>computer-readable</u> ~~readable~~ medium for generating a temporal change image based upon first and second images from different times by segmenting the first and second images and registering at least a portion of the segmented images with one another, and analyzing the temporal change image via at least one CAD algorithm.

36.   (currently amended)   A <u>computer-readable medium embodied with a</u> computer program for analyzing image data comprising:

~~at least one machine-readable medium; and~~

code stored on the ~~at least one machine-readable~~ <u>computer-readable</u> medium for analyzing a first image via at least one CAD algorithm to identify a feature of interest, and if a feature of interest is identified in the first image, accessing a second image from a

different time than the first image and generating a temporal change image based upon the first and second images.

37. (currently amended)   A <u>computer-readable medium embodied with a</u> computer program for analyzing image data comprising:
~~at least one machine readable medium; and~~
code stored on the ~~at least one machine readable~~ <u>computer-readable</u> medium for analyzing first and second images from two different times via at least one CAD algorithm to identify a feature of interest, comparing the results of the analyses, and generating a temporal change image based upon the comparison.

38. (currently amended)   A <u>computer-readable medium embodied with a</u> computer program for analyzing image data comprising:
~~at least one machine readable medium; and~~
code stored on the ~~at least one machine readable~~ <u>computer-readable</u> medium for analyzing a first image from a first time via a CAD algorithm, and analyzing a second image from a second time via a CAD algorithm, comparing the results of the analyses of the first and second images, and interactively analyzing the first and second images based upon the comparison.

39. (currently amended)   A <u>computer-readable medium embodied with a</u> computer program for analyzing image data comprising:
~~at least one machine readable medium; and~~
code stored on the ~~at least one machine readable~~ <u>computer-readable</u> medium for analyzing a first image via at least one CAD algorithm to identify a feature of interest, and if a feature of interest is identified in the first image, accessing a second image from a different time than the first image and analyzing the first and second images.